

PROJECT DESCRIPTION  
GENERAL

THIS PROJECT INVOLVES THE MODIFICATION TO THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 355 (FREDERICK ROAD) AT MD 109 (OLD HUNDRED ROAD), IN MONTGOMERY COUNTY. THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF A "DYNAMIC " OVERHEAD H. I. B. ALONG E.B. MD 109 APPROACH. THE EXISTING GROUND MOUNTED H. I. B. WARNING DEVICE SHALL REMAIN IN.

INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A FULLY ACTUATED MODE USING 5 NEMA PHASES WITH AN EXCLUSIVE/PERMISSIVE LEFT TURN ALONG N.B. MD 355 (FREDERICK ROAD). THE INTERSECTION OPERATES WITH AN EXISTING EMERGENCY FIRE HOUSE PRE-EMPTION PHASE FOR N.B. MD 355. THE NEW OVERHEAD H. I. B. ALONG THE E. B. MD 109 APPROACH WILL ACTUATE WITH ALTERNATING FLASHING YELLOW BEACONS AT THE START OF NEMA 2 AND 6 CLEARANCE INTERVAL.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. JEFFREY WENTZ, ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (301) 513-7358  
MR. AUGIE REBISH, DISTRICT UTILITIES ENGINEER  
PHONE: (301) 513-7350  
MR. WAYNE A. MOWDY, ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (301) 513-7304  
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630  
MR. KAMAL HAMUD, TRAFFIC ENGINEER - MCDPW&T  
PHONE: (240) 777-8761

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
9000	STEEL POLE WITH 60 FT. MAST ARM (BUTT SECTION ONLY)	EA	1
9571	FLAT SHEET ALUMINUM SIGNS CONSISTING OF: 1 EA W 3-3(2)(120"X60") MAST ARM MOUNT	SF	50

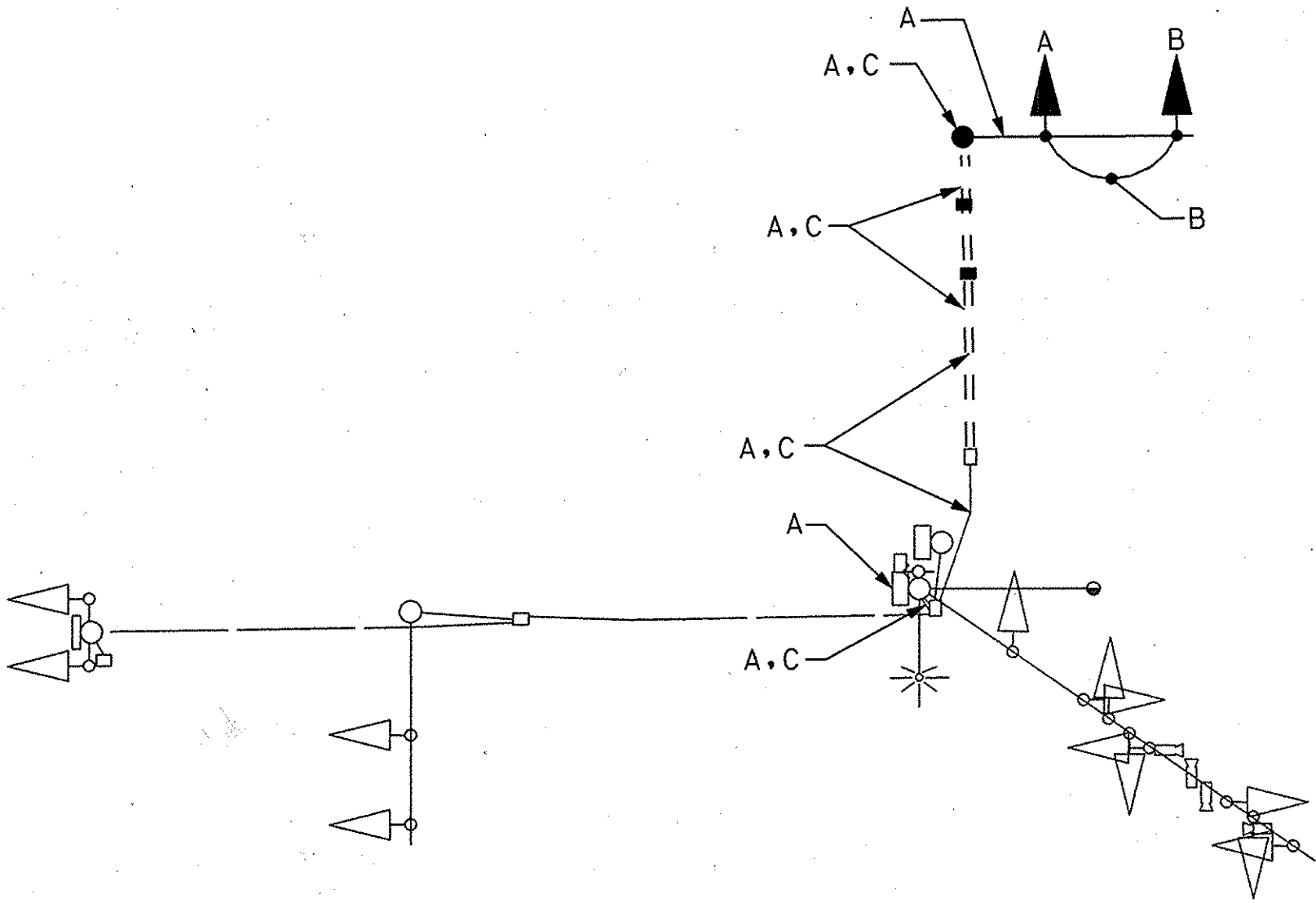
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
1001	MAINTENANCE OF TRAFFIC	EA	1
2002	TEST PIT EXCAVATION	CY	1
8003	F & I 12 INCH YELLOW LED SIGNAL HEAD SECTION	EA	2
8028	REMOVE AND DISPOSE EXISTING EQUIPMENT (PER ASSIGNMENT)	EA	1
8040	F & I CONCRETE FOR SIGNAL FOUNDATION	CY	5
8043	F & I NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	280
8047	F & I 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED	LF	20
8049	F & I 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	235
8062	F & I ELECTRICAL HANDHOLE	EA	2
8064	INSTALL OVERHEAD SIGN	SF	59
8074	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE	EA	1
8078	F & I ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	320
8082	INSTALL STEEL POLE AND MAST ARM (BUTT SECTION ONLY)	EA	1

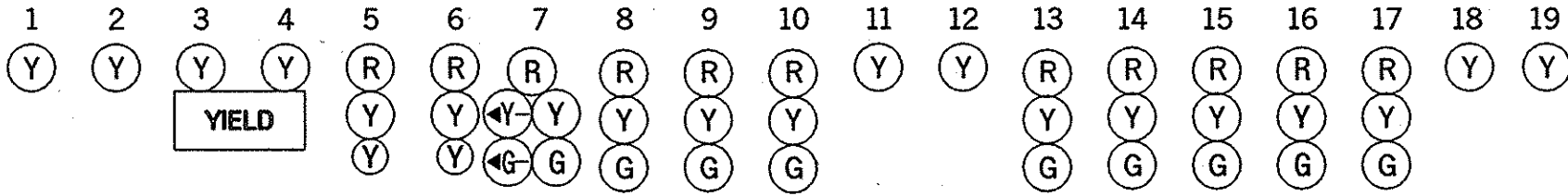
WIRING DIAGRAM

KEY

- A } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)  
B }  
C } 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE



PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	(Y)	(Y)	(Y)	(Y)	(R)	(R)	(R)	(R)	(R)	(R)	(Y)	(Y)	(R)	(R)	(R)	(R)	(Y)	(Y)	(Y)
					(Y)	(Y)	(Y)	(Y)	(Y)	(Y)			(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
					(Y)	(Y)	(Y)	(Y)	(Y)	(Y)			(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
PHASE 1 AND 6	DARK	DARK	DARK	DARK	FL8" Y	FL8" Y	←GG	G	R	R	FLY	FLY	R	R	R	R	R	FLY	FLY
1 CHANGE	DARK	DARK	DARK	DARK	FL8" Y	FL8" Y	←YG	Y	R	R	FLY	FLY	R	R	R	R	R	FLY	FLY
PHASE 2 AND 6	DARK	DARK	DARK	DARK	FL8" Y	FL8" Y	G	G	G	G	FLY	FLY	R	R	R	R	R	FLY	FLY
2 AND 6 CHANGE	DARK	DARK	DARK	DARK	FL8" Y	FL8" Y	Y	Y	Y	Y	FLY	FLY	R	R	R	R	R	FLY	FLY
PHASE 4 AND 8	DARK	DARK	DARK	DARK	FL8" Y	FL8" Y	R	R	R	R	DARK	DARK	G	G	G	G	G	FLY	FLY
4 AND 8 CLEARANCE	DARK	DARK	DARK	DARK	FL8" Y	FL8" Y	R	R	R	R	FLY	FLY	G	G	G	G	G	FLY	FLY
4 AND 8 CHANGE	DARK	DARK	DARK	DARK	FL8" Y	FL8" Y	R	R	R	R	FLY	FLY	Y	Y	Y	Y	Y	FLY	FLY
FLASHING OPERATION	DARK	DARK	DARK	DARK	FL8" Y	FL8" Y	FLY	FLY	FLY	FLY	DARK	DARK	FL/R	FL/R	FL/R	FL/R	FL/R	FLY	FLY

FIRE PRE-EMPTION

	FLY	FLY	FLY	FLY	8" Y	8" Y	←GG	G	R	R	FLY	FLY	R	R	R	R	R	FLY	FLY
PRE-EMPTION PHASE 1 AND 6	FLY	FLY	FLY	FLY	12" Y	12" Y	←GG	G	R	R	FLY	FLY	R	R	R	R	R	FLY	FLY
PRE-EMPTION CLEARANCE PHASE 1 AND 6	FLY	FLY	FLY	FLY	FL8" Y	FL8" Y	←YG	G	R	R	FLY	FLY	R	R	R	R	R	FLY	FLY
PHASE 2 AND 6 NORMAL OPERATION	DARK	DARK	DARK	DARK	FL8" Y	FL8" Y	G	G	G	G	FLY	FLY	R	R	R	R	R	FLY	FLY

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
**MD 355 (FREDERICK ROAD) AND  
MD 109 (OLD HUNDRED RD)**  
URBANA, MARYLAND

GENERAL INFORMATION PLAN

SCALE N.T.S. DATE 09/2006 CONTRACT NO. AT7825185

DESIGNED BY S. SMITH COUNTY MONTGOMERY

DRAWN BY L. YEH LOGMILE 15010911.91

CHECKED BY S. RENZI T.I.M.S. NO. H004

F.A.P. NO. TOD NO.

TS NO. 3379D DRAWING PSG OF N001 SHEET NO. 2 OF 2

TOD No.: AT782-53  
SHA No.: MO574ASE/BSE  
MD 355 @ MD 109

SABRA, WANG & ASSOCIATES, INC.  
1504 JOH. AVENUE  
SUITE 100  
BALTIMORE, MD 21227  
(410) 737-6584  
WWW.SABRA-WANG.COM